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SHORT SUBJECTS AND TIMELY TIPS FOR PESTICIDE USERS

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BIOLOGICAL CONTROL, IPM, AND EXOTIC PESTS PEST CONTROL

SPRUCING UP YOUR IPM SKILLS
(Plan Now to Attack Spruce Aphids Next Year)
(Todd Murray, Whatcom County IPM Project Manager, WSU)

(Source: *Agricultural & Environmental News*, June 2003, Issue No. 206)

This article provides the reader with a look at managing the spruce aphid. Included are a precise description of this exotic pest, a look at its life history (the daily planner of a spruce aphid) and a discussion of the damage it has caused from Alaska to California due to mild temperatures the past few winters. The author offers tips on assessing damage and methods of control. The article is available online at http://www.aenews.wsu.edu/June03AENews/June03AENews.htm or contact Pat

Skyler (916) 454-0817, pskyler@fs.fed.us. For additional information –

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REMOTE SENSING TO TRACK FIRE ANTS

(Source: ARS News Service, May 1, 2003)

Recently developed remote sensing techniques are being used by Agricultural Research Service (ARS) researchers to assist the Tennessee Department of Agriculture in identifying high-priority areas in quarantined counties, as part of an areawide program to manage imported fire ants. The program involves assessing new and emerging bait products and releasing parasites and pathogens to attack the ants. Remote sensing of imported fire ant (IFA) mounds with high-resolution digital imagery allows the researchers to quickly identify and target areas with high IFA population densities. An article in the May issue of Agricultural Research magazine provides additional information on this research. The article can be accessed online at http://www.ars.usda.gov/is/AR/archive/may03/biol0503.htm or contact Pat Skyler (916) 454-0817, pskyler@fs.fed.us. For additional information on the IFA research –

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HOW TO CONTROL KUDZU

(Source: *The Forestry Source* [Online], May 2003.)

"Sell the land and move away" is an infamous line from some forestry professionals when asked about how to control the invasive plant kudzu. Seriously though, items discussed in this article include: control by grazing and herbicides, the importance of determining the age of the kudzu patch because it affects the rate at which herbicides should be used, effective control in young pine and hardwoods stands, in tree-draped areas and around water. The article is available online at http://www.safnet.org/archive/0503_howtokudzu.cfm or -

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HUMAN HEALTH

FOREST FRAGMENTATION INCREASES LYME DISEASE RISK

(Source: *The Forestry Source* [Online], April 2003)

According to a recently published study by a team of researchers from Bard College, Rutgers University and the Institute of Ecosystem Studies on tick densities in fragmented forest parcels in Dutchess County, New York "the density and infection rates of blacklegged ticks was dramatically higher in smaller forest fragments, especially those totaling less than 5 acres." In comparing small and large forest fragments, the researchers found "seven times more nymphal blacklegged ticks infected with Lyme disease per square meter." As a way to explain the "high percentage of ticks infected with Lyme disease in these small forest patches," Felicia Keesing, assistant professor of biology at Bard College and the study's lead author, "points to the high populations of white-footed

mice--the chief reservoir of the Lyme bacterium--that thrive in small forest fragments, whereas the animals that prey on and compete with them do not".

The article can be found online at http://www.safnet.org/archive/0403_lyme.cfm or -

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NEWLY PATENTED VIRUS COULD HELP CONTROL DISEASE-CARRYING MOSQUITOES
(by Jim Core)

(Source: *ARS News & Information*, [Online] April 23, 2003)

Agricultural Research Service (ARS) scientists have received a patent for a baculovirus, a virus specific to arthropods, which kills *Culex* mosquitoes. *Culex* mosquitoes have been found to transmit the disease West Nile virus (WNV) and the closely related St. Louis encephalitis (SLE). The baculovirus infects only *Culex* mosquitoes, not other insects, plants, wildlife or people. The patent also includes a method for transmitting the baculovirus to the *Culex* mosquitoes. The ARS is seeking partners to license the technology and bring it to the market. A copy of the article can be accessed online at http://www.ars.usda.gov/is/pr/2003/030423.htm or contact Pat Skyler (916) 454-0817, pskyler@fs.fed.us. For additional information –

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TIPS TO HELP YOU AVOID MOSQUITOES

(Source: California Department of Pesticide Regulation, Press Release (03-11), May 8, 2003)

This informative press release offers tips on how to eliminate mosquitoes, tips on what to do "once mosquitoes take wing in your area", West Nile safety tips, and additional sources of information to help reduce your exposure to mosquitoes. For a copy of the press release access it online at http://www.cdpr.ca.gov/docs/pressrls/may8.htm or -

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MISCELLANEOUS

THE DYNAMICS OF AN INTRODUCED PATHOGEN IN A NATIVE MONTEREY PINE (*PINUS RADIATA)* FOREST

(Source: *Forest Ecology and Management* [online], Vol. 179, Issues 1-3, pp. 209-211, 2003)

"Abstract: The plant pathogenic fungus, *Fusarium circinatum*, is the cause of a major epidemic of pitch canker in urban forests of Monterey pine (*Pinus radiata*) in California. This pathogen is now also well established in all three mainland, native populations of Monterey pine where it causes conspicuous branch dieback and, frequently in association with native bark beetles, increased tree mortality. In the present study, permanent plots were established on the Monterey peninsula to characterize the severity and progress of pitch canker in the largest of the native P. *radiata*

populations. The results indicate that the disease is significantly more severe, and is progressing more rapidly, in managed stands than in the wildland areas. Furthermore, the disease is progressing significantly faster in the coastal zone than in more inland locations."

If you are unable to access the article online –

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THE USE OF REMOTELY SENSED DATA FOR THE DETECTION, MAPPING AND MONITORING OF SUDDEN OAK DEATH

(L. Mahon, C. Fischer, L. Levien and J. Mai)

"Abstract: The California Department of Forestry and Fire Protection (CDF) and the US Forest Service (FS), with cooperation of the California Oak Monitoring Task Force, are conducting a monitoring project for Sudden Oak Death (SOD) under the umbrella of the larger CDF/FS Land Cover Mapping and Monitoring Program (LCMMP). The objective of the SOD monitoring project is to evaluate the use of multi-scale remotely sensed data to identify 'hot spots' of oak mortality and verify these areas with a combination of airborne imagery, aerial surveys and field verification."

For a copy of this paper contact Pat Skyler, (916) 454-0817, pskyler@fs.fed.us. For additional information on the monitoring project –

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SWISS NEEDLE CAST EXISTS IN TWO FORMS OF VARYING VIRULENCE

(Source: *The Forestry Source* [Online], March 2003.)

Swiss needle cast, a foliage disease which is caused by a fungus native to the Pacific Northwest (PNW), quickly evolved from a minor nuisance into a serious and costly threat and for years, scientists have been trying to figure out why. Scientists at Oregon State University's Swiss Needle Cast Cooperative may have solved the mystery thanks to a recent discovery. They have found that the fungus "exists in two distinct genetic lineages, one of which may be more virulent and damaging than the other." One of the fungal lineages has a worldwide distribution while the second has been found only in the Oregon Coast Range. In the 1970's Swiss needle cast was a problem for the region's Christmas tree industry. However, during the past decade, "the disease spread rapidly, dramatically reducing the growth of hundreds of thousands of acres of Douglas-fir on both public and private forestlands." As many as 385,000 acres in the PNW region may be moderately to severely affected, according to the newest surveys. Gregory Filip, a professor at Oregon State University, says "More controlled research needs to be done before we can be sure how these two strains of the fungus interact and what problems they will cause, together or separately." Those studies are currently underway.

A copy of the article can be found online at http://www.safnet.org/archive/0303_swissneedle.cfm or

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THE BEST TOOLS FOR PEST MANAGEMENT

This free, full color, 12-page leaflet, presents a comprehensive listing of publications, CD's, slide sets, and videos published over the years by the University of California. Highlights include the Natural Enemies Handbook (1998), IPM in Practice: Principles and Methods of Integrated Pest Management (2001), and the highly acclaimed series of a dozen liberally illustrated, clearly written IPM manuals. To receive a copy, write to: Communication Services, Agric. & Natural Resources, University of California, 6701 San Pablo Ave., 2nd Floor, Oakland, CA 94608-1239, Fax: (510) 643-5470, or Email: anrcatalog@ucdavis.edu.

ON THE INTERNET

INSECT MANAGEMENT HANDBOOK

The 2003 Pacific Northwest Insect Management Handbook is available online at http://pnwpest.org/pnw/insects. Editor D.M. McGrath and more than 30 collaborating authors present pest insect data in detail for the majority of the area's crops. Included are sections on home gardens, safety, biocontrol agents, and other material, along with hundreds of color photos of key insect pests and pest-caused damage. The site also contains numerous links to additional information resources.

NEW WEST NILE VIRUS WEBSITE

Washington State University Cooperative Extension has launched a comprehensive website on the West Nile Virus (WNV) at http://wnv.wsu.edu/. The site includes general information on the disease and its vectors, a calendar of WNV related events, a list of resources both general and specific, and links to further information. (Source: *Agrichemical & Environmental News*, May 2003).

PUBLICATIONS*

Bridges, C.M. and M. D. Boone. 2003. The interactive effects of UV-B and insecticide exposure on tadpole survival, growth and development. *Biological Conservation*, Vol. 113, Issue 1, pp. 49-54.

Davidson, C., H. B. Shaffer, and M.R. Jennings. 2002. Spatial tests of the pesticide drift, habitat destruction, UV-B, and climate-change hypotheses for California amphibian declines. *Conservation Biology*, Vol. 16, Issue 6, pp. 1588-1601

Garbelotto, M., J.M. Davidson, K. Ivors, P.E. Maloney, D. Huberli, S.T. Koike, and D.M. Rizzo. 2003. Bay laurel and native plants other than oaks are the main hosts for the Sudden Oak Death Pathogen, *P. ramorum*, in California. *APSnet*, April 2003.

Ketchum, J.S. and R. Rose. 2003. Preventing establishment of exotic shrubs (*Cytisus scoparius* (L.) Link. and *Cytisus striatus* (Hill)) with soil active herbicides (hexazinone, sulfometuron, and metsulfuron). *New Forests* 25:83-92.

Rizzo, D.M. and M. Garbelotto. 2003. Sudden oak death: Endangering California and Oregon forest ecosystems. *Frontiers in Ecology and the Environment*, 2(5):197-204.

Roberts, D.L. 2003. The emerald ash borer: A threat to ash in North America. Michigan State University Extension.

Ucar, T., F.R. Hall, J.E. Tew, and J.K. Hacker. 2003. Wind tunnel studies on spray deposition on leaves of tree species used for windbreaks and exposure of honey bees. *Pest Management Science*, Vol. 59, Issue 3, pp. 358-364.

*Note: For information on how to obtain a copy of a publication contact Pat Skyler (916) 454-0817, pskyler@fs.fed.us.

UPCOMING EVENTS

15-18 June 2003. 2nd Annual Precision Forestry Symposium, Seattle, WA. Contact: Forestry Continuing Education Program (206) 543-0867 or visit their website at http://www.cfr.washington.Edu/outreach/PreFor/.

6-11 July 2003. 15th International Plant Protection Congress, Beijing, China. Contact: William Chen (86-10) 6210 3108, Email: cicast@public.bta.net.cn or visit their website at http://www.plantprotection.org/15THIPPC.htm.

20-23 July 2003. The 43rd Annual Meeting of the Aquatic Plant Management Society, Portland, ME. Contact: Ken Manual, Program Chair, (704) 875-5424, Email: klmanuel@duke-energy.com or visit their website at http://www.apms.org/2003/2003.htm.

23-24 July 2003. Joint field tour of the California Forest Pest Council (CFPC) Weed Committee and the California Forest Soils Council, Auburn, CA. Contact: Bill Morrison (530) 272-2297, Email: bmorrison@spi-ind.com or visit the CFPC website at http://www.caforestpestcouncil.org/.

27-30 July 2003. American Society of Agricultural Engineers 2003 Annual International Meeting, Las Vegas, NV. Contact: Sharon McKnight, (269) 428-6333, mcknight@asae.org or visit their website at http://www.asae.org/meetings/am2003/index.html.

28-31 July 2003. Southern Forest Insect Work Conference, New Orleans, LA. Contact: John Foltz (352) 392-1901, ext. 130, foltz@ufl.edu or visit their website at http://www.sfiwc.org/2003.

30-31 July 2003. National Spray Model and Application Technology Working Group, sponsored by the USDA Forest Service, and held in conjunction with the American Society of Agricultural Engineers 2003 Annual International Meeting. Contact: Harold Thistle, (304) 285-1574, hthistle@fs.fed.us.

18-22 August 2003. The Western International Forest Disease Work Conference, Grants Pass, OR. Contact: Ellen Goheen (541) 858-6125, egoheen@fs.fed.us or visit their website at http://www.fs.fed.us/foresthealth/technology/wif/index.php.

7-9 September 2003. Regional Conference on Agricultural Health and Safety Issues – Challenges in Agricultural Health and Safety, San Francisco, CA. Contact: Gwen Oliver (530) 752-5253, or visit their website at http://agcenter.ucdavis.edu/Announce/AgChallenges2003.php and select "News and Events".

7-11 September 2003. 226th American Chemical Society National Meeting (ACS), New York City, NY. Contact: Dr. Chris Peterson (662) 325-0199, cjpeterson@fs.fed.us, Dr. Terry Spittler (315) 787-2283, tds2@cornell.edu or visit the ACS website at http://membership.acs.org/a/agro and scroll to the middle of the page.

8-11 September 2003. Biennial National Silviculture Workshop, Silver Creek, CO. Contact: Monty Maldonado (202) 205-5683 or Clark Baldwin (703) 605-5178.

17-20 September 2003. American Forests: The National Urban Forest Conference, San Antonio, TX. Contact: Donna Tschiffely (703) 904-6932, Email: donna@amfor.org or visit their website at http://www.americanforests.org/graytogreen/conference.

21-28 September 2003. XII World Forestry Congress, Quebec, Canada. Contact: 1 (418) 694-2424, Fax: 1 (418) 694-9922, Email: sec-gen@wfc2003.org or visit their website at http://www.wfc2003.org/.

2-4 October 2003. California Exotic Pest Plant Council 2003 Meeting, Lake Tahoe, CA. Contact: Exec. Director, CalEPPC (510) 525-1502, Email: DWJohnson@caleppc.org.

25-29 October 2003. Society of American Foresters National Convention, Buffalo, NY. Contact: Madelaine Morgan (301) 897-8720, ext. 111, Email: morganm@safnet.org or visit their website at http://www.safnet.org/convention/.

26-29 October 2003. Entomological Society of America Annual Meeting, Cincinnati, OH. Contact: ESA (301) 731-4535, Email: meet@entsoc.org or visit their website at http://www.entsoc.org/annual_meeting/2003/index.html.

3-6 November 2003. Western Forest Insect Work Conference, Guadalajara, Mexico. Contact: Mike Wagner, Email: mike.wagner@nau.edu or visit their website at http://www.fsl.orst.edu/wfiwc/.

3-7 November 2003. Invasive Plants in Natural and Managed Systems: Linking Science and Management and 7th International Conference on the Ecology and Management of Alien Plant Invasions, Ft. Lauderdale, FL. Contact: Nelroy Jackson, (909) 279-7787, Email: nelroy.e.Jackson@monsanto.com or Carla D'Antonio (510) 643-6341, Email: dantonio@socrates.berkeley.edu or visit their website at http://esa.org/ipinams-emapi7/.

CALL FOR ARTICLES

Please forward to me all articles, meeting announcements, publications, reports, or other items of interest that you would like included in the next issue of Short Subjects & Timely Tips for Pesticide Users. Please include the name, State, and telephone number of the individual who can be contacted for further information:

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